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Subject: BW prevention TOR  
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Josh,

Very nice to hear from you, especially to learn that you are still pressing ahead with counter BW measures. I just finished Laurie Garrett's new book, so you've been freshly on my mind.

To follow is a separate e-mail introducing the Community War ideas that Andy Marshall has been kind enough to be interested in. And in yet another I'll address the Iowa explosion.

Pending a direct conversation, here are a few thoughts about the BW prevention challenge. It may be more helpful if I offer you a few allied ideas rather than a critique of the TOR itself -- though I'd be happy to help with that, too. I'm quite conscious that you are way ahead of me on all these matters.

SCOPE There may be considerable tension between the desire in the Pentagon to limit the work to 'military measures' and the fact that the natural aperture of BW is much wider. The necessary surveillance and intel processes are a hybrid of data collection systems operated by many different agencies/businesses/researchers in different countries and by various international organizations. The military-intel communities have only a fraction of the professional skills needed to design and operate those systems and to interpret their data. Even more critically, it seems to me, the huge preponderance of both preventive and response mechanisms are non-military.

Would it be possible for the TOR to drive toward "military contributions of the prevention of biological attacks" while allowing the study to map the much broader terrain enroute? Andy mentioned to me that Sec. Rumsfeld is open to suggestions that other agencies have roles in national security. This DSB study may not be the right vehicle, but at some point we need to push the national security leadership to draw new institutional boundaries around "security." Other countries are way ahead of us in this regard -- I work with the Swedes, Canadians, and Brits each of whom are evolving a government apparatus around new, broader frameworks for security.

NUANCED USE OF FORCE Nuanced to me means politically nuanced, not just 'dial-a-bang' weapon design -- and you said another study group has the conn on strike. The only purpose of taking a military action (in our democracy) is to achieve a political outcome. I.e., Rule One for a military planner is to design actions which have useful political outcomes or which aggregate to the political-strategic from the tactical level. I've been much alarmed in recent years by the absence, not just of nuance, but even of the recognition by our senior military leaders that the consequences of the use of force were within their ken.

Your TOR is impressive in that regard -- including its recognition of the moral well-springs which ought to feed our calculus. Sorting through the reasons why naked threats to unleash massive firepower do not appear to carry the weight formerly ascribed to destruction

dominance will be very useful. Such an analysis would, I assume, be a truly multi-sided net assessment of how their politics, ours, and those of a host of 3rd parties would dynamically interact. Perhaps some of the early nuclear thinking about what it means to be "credible" could be useful. A note on another method is next below.

*7 MC 2005*  
So I urge you to hang on to the political-moral dimensions -- but be prepared for resistance and/or incomprehension by those who see the military merely as hired guns -- "You point, we shoot."

USE As you are doubtless arguing yourself, "use" is not just release/detonation of bio, chem, or nuclear weapons. Use includes the earliest acts of acquisition, the recognized/suspected possession, and the brandishing, too. Any circumstance that is altered because of the perceived implications of BCN is 'use.' Prevention must deal with that full spectrum or it is not prevention.

WMD You didn't use this dreadful term in your TOR; the study group will need to fight against its use anywhere. The sloppy use of "WMD" is part of the problem. There is no such thing as "WMD!" This is not just a windmill. As it should, the administration is rethinking everything. Somewhere among those groups are people who are revisiting the Bush-I/Clinton definition of WMD as NBC (I prefer BCN) + missile delivery. You'll need that definition to be reexamined, it is inadequate to support a prevention effort.

DRUG RESISTANT BUGS Human biological systems evolve just like micro-biological systems. Some, like HIV, are able to adapt very rapidly. Prevention strategies must incorporate this. We've been railing against BW and putting various anti-BW measures into place for some years now. Like weak, too-brief doses of antibiotics, the net effect has been to foster the evolution of non-proliferation resistant practices for BW acquisition, possession, and employment. (More in a following e-mail.) These dynamics must, must, must be included in a prevention policy.

RED TEAMS AND RULE-BASED GAMING I used some experimental gaming a few years ago to demonstrate two tools which may be of interest. Problem 1 was how to design a modern Red Team -- a group that could replicate with useful verisimilitude the decision dynamics of a regime of interest/ROI. The Soviet-era models were expensive and cumbersome; we need a way to quickly portray any of quite a number of ROIs -- some pop-up, some more durable, like Saddam.

*strategic  
premise*  
The key is in complexity's insight that complex, self-organized behaviors emerge from a set of simple rules. Obviously, if we could a) discern those core 'rules' and b) alter one then c) we would have both a powerful lens into the ROI's choices and a way to test actions which could influence those choices.

As a demonstration, I ran a game with Saddam with BW. Not incidentally, the results suggested that Saddam's interest in possessing BW capabilities was motivated, first, by his need for a way to remain in power in the face of an internal uprising and second by his need for leverageable stature among his immediate neighbors. I.e., looking to understand Saddam's BW programs through the lens of risks to US forces is to look through the least-revealing

lens.

On the procedural side, the Red Team work showed three things of direct relevance to your DSB work:

- 1.. Through use of an elegantly simple OODA-loop architecture, we are quite capable of mapping the families of different decision among various course of action alternatives. And we could use that rule-based course of action calculator to test the responses to our own choices.
- 2.. Semi-virtual Red Teams are feasible. I.e., we could operate inexpensively quite a stable of Red Teams, each focused on a particular target country/leader. These groups could easily respond to a policy maker's "what if?" sorting through various courses of action. Such groups are much better suited to providing such advice that the intel community which ought to be limited to retailing facts.
- 3.. There is an important evolution of motivation and "use". Both the possessor's choices and ours change as one proceeds from a capabilities acquisition phase to possession to brandishing to actual release. To map this I showed that we can use linked OODA-loops in which each is watching the other as the strategic situation evolves across that spectrum. What may this mean for your study? It offers a concrete way to equip our decision makers with the ability to make decisions along the whole continuum from prevention to constraint/deterrence to response. And it fits within the 'military means' TOR.

## CHAIN REACTIONS

Many -- perhaps the majority -- of BCN 'use' transactions around the proliferated world have little to do with us -- at least in the minds of those doing the acquisition, possessing, brandishing, etc. We must understand those inter-3rd party dynamics, especially if we assign ourselves the prevention mission.

Most especially, we need to understand, I suggest, the multi-3rd party, multiple weapon type interactions that seem likely. Consider nukes in Asia. Indo-Pak 'use' likely engages a chain of interactions running from the Japanese, N.Korea and China through South Asia to Iran, Iraq, and Israel. BW capabilities would quickly become entwined. Our military leverage would near zero. Our diplomats, not our military, would be on the front lines and they have zero training in the diplomacy of quelling chain reactions that are running away toward BCN release.

We need, first, to unhook from the old bi-polar dynamics on US-Soviet nuclear exchanges and think through these chain reaction decision dynamics. The only person I know who even started to think about that was a young woman political scientist out at Iowa State and her work suggested that we might see counterintuitive outcomes where these actors took surprising, extreme use decisions when under pressure.

One possible outcome of such investigations could be a policy of helping possessors gain the capacity to think better about what they have and how to 'use' it -- safe sex for bugs and

neutrons.

NO NON-PROLIFERATION, PLEASE! We are still hobbled by the non-proliferation industry whose political clout and knee-jerk opposition to new thinking is not to be underestimated. You saw how the counter-proliferation strategy was hijacked by these zealots. Prevention does not mean eradication, prevention addresses decisions to 'use.' (Is eradication possible? I wonder what your assumptions are.) You'll need to be prepared to deflect/defuse the non-proliferation crowd's latent hostility.

PREVENTION TO PEACEBUILDING One of the important lessons of my 6 years traveling the world doing prevention is that "prevention" becomes too narrow a rubric. It is not enough merely to organize to avoid a pending event. A strategy of prevention inherently demands peacebuilding or 'peace-enabling' in our latest formulation. This is not mission creep. It is recognizing that the inherently holistic integration of many different factors -- just as your TOR reflects -- dictates a broader strategic engagement.

REPERTOIRE And thus weapon deployment is only one, often minor, feature in a prevention strategy. One cannot design even those use-of-force plays by the Pentagon without considering how they fit in and reinforce the boarder repertoire of prevention policies and actions.

LANGUAGE You asked about labels. I don't yet have a snappy title or a one-liner to offer. But I do think that new language is essential. Our dictionary is too reliant on the f=3Dma concepts of power politics as physics. We need a new organic, bio-systems lexicon, a new conceptual toolkit. Much of the newly current RMA lingo is baloney, as you know from tracking Andy's distaste at the misuse of his insights. Even worse is the old nuclear exchange framework (which was probably less illuminating than we thought it was.)

You could do a world of good just by helping a new conceptual toolkit take hold -- there is not much traction in the familiar but sloppy thinking that obscures the issues today.

- - - Enough. Let's talk. I'd like very much to be helpful. Is there a way I could be included in a substantive role in the DSB work?

Very best wishes, Larry

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